

REMARKS

Claims 1-42 are pending in the application. Claims 1, 40, and 41 are independent claims. New claims 43 and 44 have been added herein. Claims 1-42 stand rejected by the examiner. Assignee traverses the instant claim rejections.

Examiner's Interview

Assignee's representatives would like to thank examiner Sheng Tsai for the courtesies extended to assignee's representatives (Charles Shorb, Timothy Wilson, Fonda Daniels-Farrar, and John Biernacki) during the telephone interview on August 31, 2006. The interview discussed the office action's statements on pages 14 and 15 regarding atomic operations. The interview also discussed a proposed amendment to claim 1 as well as dependent claims 16 and 24. The remarks and the amendments contained herein further summarize the interview.

Claim Rejections

The independent claims stand rejected under 35 U.S.C. 102(b) as being anticipated by Oliver (U.S. Patent No. 6,029,190). These rejections are traversed.

The independent claims have been amended to recite that a hardware atomic operation is used on the shared locking data store or lock state data for determining how access to a resource is to be handled. Support for this limitation is found, for example, on page 8, lines 5-6 of assignee's specification. New dependent claim 44 further discusses hardware atomic operations in reciting that a hardware atomic operation includes machine level instructions for performing an operation on the shared locking data store for handling access to the resource. Additionally, assignee is concurrently submitting in

an information disclosure statement the following references that also discuss hardware atomic operations: “UNIX Systems for Modern Architectures,” Curt Schimmel, Addison-Wesley Publishing Company, Copyright 1994; and “Operating Systems,” Fourth Edition, William Stallings, Ph.D., Prentice Hall, Copyright 2001. For example, atomic read and write operations are discussed in section 8.3.2 of the Schimmel reference, and section 8.3.3 discusses hardware support (e.g., machine level instructions) for performing such operations. It should be understood that the discussions provided in these references are only non-limiting examples for the terms used in the currently pending independent claims. With the above discussion in mind regarding hardware atomic operations and its utilization within the context of the independent claims, the independent claims are allowable because Oliver does not disclose such limitations of the independent claims (whether considered alone or in combination with any other of the cited references).

Assignee disagrees with other positions maintained in the office action. For example, the cited references do not disclose, teach or suggest claim 16’s limitation that a set status for the write requested data is used to indicate whether an operating system (OS) mutex lock is to be used for processing access to the resource. As an illustration, Oliver is obligated to use a mutex for handling requests (e.g., see Figure 1 of Oliver); whereas claim 16 recites that an indication is used to determine whether a mutex lock is to be used or not – that is, there is no obligation to have to use the mutex lock in claim 16 and thus it can be avoided. For this additional reason, claim 16 is allowable and should proceed to issuance.

As another example, the cited references do not disclose, teach or suggest claim 24’s limitation that the write requested data, writer active data, and wait event posted data

provide multi-threaded protection in place of an operating system (OS) mutex. As an illustration, Oliver is obligated to use a mutex for handling requests (e.g., see Figure 1 of Oliver); whereas the approach of claim 24 recites avoiding a mutex – that is, there is no obligation to have to use the mutex lock. For this additional reason, claim 24 is allowable and should proceed to issuance.

Lastly assignee has amended claim 1 to recite the claimed subject matter as a memory for storing a shared locking data store. The dependent claims were only amended for purposes of being consistent with the amended claim 1.

CONCLUSION

For the foregoing reasons, assignee respectfully submits that the pending claims are allowable. Therefore, the examiner is respectfully requested to pass this case to issue.

Respectfully submitted,

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